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(FILE 'HOME' ENTERED AT 11:02:16 ON 11 JAN 2007)

FILE 'REGISTRY' ENTERED AT 11:02:25 ON 11 JAN 2007

L1 STRUCTURE UPLOADED

L2 STRUCTURE UPLOADED

L3 2 S L1 OR L2

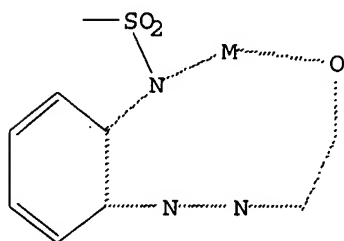
L4 49 S L1 OR L2 FULL

FILE 'CAPLUS' ENTERED AT 11:03:36 ON 11 JAN 2007

L5 11 S L4

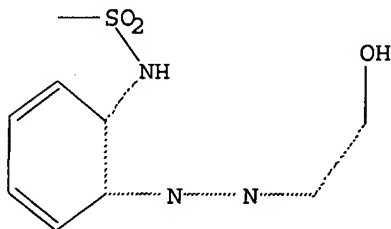
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L1 STR



Structure attributes must be viewed using STN Express query preparation.

L2 STR



Structure attributes must be viewed using STN Express query preparation.

L4 49 SEA FILE=REGISTRY SSS FUL L1 OR L2

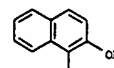
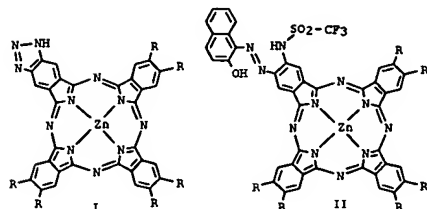
L5 11 SEA FILE=CAPLUS ABB=ON PLU=ON L4

=> d 1-11 bib abs hitstr

L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:1174206 CAPLUS
 DN 144:63394
 TI New unsymmetrical zinc-phthalocyanine conjugated with one azo-dye moiety:
 Synthesis via opening the fused triazole ring and spectral properties
 AU Mico, Xavier Alvarez; Vagin, Sergei I.; Subramanian, Lakshminarayanaiah
 R.; Ziegler, Thomas; Hanack, Michael
 CS Universitat Tuebingen, Institut fuer Organische Chemie, Tuebingen, 72076,
 Germany
 SO European Journal of Organic Chemistry (2005), (20), 4328-4337
 CODEN: EJOCHF; ISSN: 1434-193X
 PB Wiley-VCH Verlag GmbH & Co. KGaA
 DT Journal
 LA English
 OS CASREACT 144:63394
 GI

L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 RN 871233-65-7 CAPLUS
 CN Zinc, [1,1,1-trifluoro-N-[9,10,16,17,23,24-hexakis[3,5-bis(1,1-dimethylethyl)phenoxy]-3-[(1E)-(2-hydroxy-1-naphthalenyl)azo]-29H,31H-phthalocyanin-2-yl]-N(29,N(30,N(31,N(32)methanesulfonamido(2-)]-, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A



AB A new method for the preparation of compds. containing an azo-dye moiety via opening the activated triazole ring upon coupling with nucleophiles was successfully applied to a mono-triazole-fused phthalocyaninato Zn complex I (R = OC6H3(CMe3)2-3,5). The prepared unsym. Zn-phthalocyanine II (same R) conjugated with a 2-hydroxy-1-naphthylazo moiety in the periphery was characterized by UV/visible, FTIR, 1H and 13C NMR spectroscopy, MALDI-TOF spectrometry, and elemental anal., and the data support its structure. The assignment of signals in the 1H and 13C NMR spectra of compound II was based on the data from 2-dimensional CH-COSY and HC-HMBC measurements (C-H coupling across one bond and long-range H-C coupling). The compound exhibits interesting spectroscopic properties, indicating high acidity of the hydroxy group. This phthalocyanine behaves as a strongly solvatochromic compound and can exist in different forms depending on the concentration and nature of solvent. Addnl., photodecompn. of II in CHCl3

and

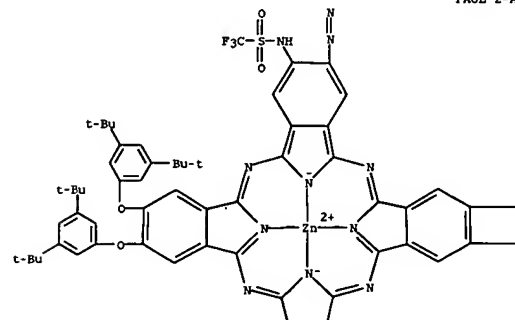
THF proceeds via different pathways.

IT 871233-65-7P

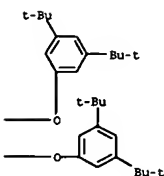
RL: FRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP
 (Preparation); RACT (Reactant or reagent)
 (preparation, self-protonation and solvatochromism, NMR and UV-visible
 spectra, and photodecompn.)

L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A

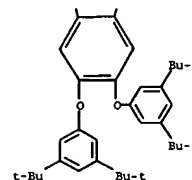


PAGE 2-B



L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 3-A



RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

LS ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:982251 CAPLUS
 DN 143:268286
 TI Production of ortho- and para-substituted aromatic azo compounds and other azo compounds
 IN Subramanian, Lakshminarayanaswamy; Alvarez, Mico Xavier;
 Ziegler, Thomas
 PA Universitat Tuebingen, Germany
 SO Ger. Offen., 18 pp.
 CODEN: GWXXEX
 DT Patent
 LA German
 FAN.CNT 1

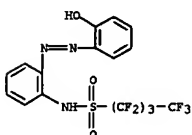
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 102004005316	A1	20050908	DE 2004-102004005316	20040204
PRAI	DE 2004-102004005316		20040204		
OS	MARPAT 143:268286				

AB The title compds., useful in dyes, are prepared by nucleophilic coupling of 1,2,3-triazoles of specified structure. Stirring 1 part benzotriazole in 1 part glyme with an equimolar amount of BuLi for 1 h at 0°, adding 1.5 parts nonafluorobutanesulfonyl fluoride dropwise, and refluxing for 3 h gave 89% 1-[(nonafluorobutane)sulfonyl]triazole (I). Stirring NaH 3, phenol 3, and I 2.5 equivalent in PhMe at room temperature for 7 h gave 76% 2-[(2-hydroxyphenyl)azo]-1-[(nonafluorobutane)sulfonyl]benzene.

IT 695202-86-9P 695202-88-1P 695202-89-2P
 695202-90-5P 863708-37-6P 863708-39-8P
 863708-40-1P

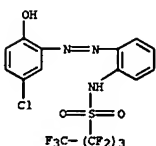
RL: IMF (Industrial manufacture); FRP (Properties); PREP (Preparation) (preparation of diazo compds.)

RN 695202-86-9 CAPLUS
 CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-[(2-hydroxyphenyl)azo]phenyl]- (9CI) (CA INDEX NAME)

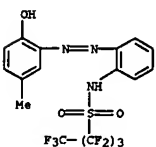


RN 695202-88-1 CAPLUS
 CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-[(2-hydroxy-3-methoxyphenyl)azo]phenyl]- (9CI) (CA INDEX NAME)

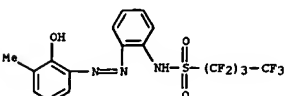
LS ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



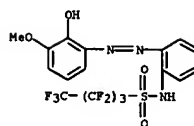
RN 863708-39-8 CAPLUS
 CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-[(2-hydroxy-5-methylphenyl)azo]phenyl]- (9CI) (CA INDEX NAME)



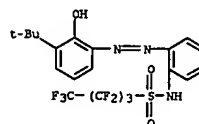
RN 863708-40-1 CAPLUS
 CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-[(2-hydroxy-3-methylphenyl)azo]phenyl]- (9CI) (CA INDEX NAME)



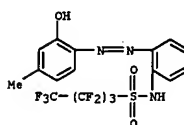
LS ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 695202-89-2 CAPLUS
 CN 1-Butanesulfonamide, N-[2-[(3-(1,1-dimethylethyl)-2-hydroxyphenyl)azo]phenyl]-1,1,2,2,3,3,4,4,4-nonafluoro- (9CI) (CA INDEX NAME)



RN 695202-90-5 CAPLUS
 CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-[(2-hydroxy-4-methylphenyl)azo]phenyl]- (9CI) (CA INDEX NAME)

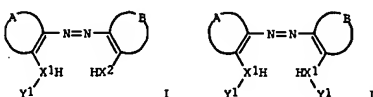


RN 863708-37-6 CAPLUS
 CN 1-Butanesulfonamide, N-[2-[(5-chloro-2-hydroxyphenyl)azo]phenyl]-1,1,2,2,3,3,4,4,4-nonafluoro- (9CI) (CA INDEX NAME)

LS ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:63003 CAPLUS
 DN 143:142838
 TI Optical recording material containing metal-azo chelate compound
 IN Tanabe, Junshi; Shinkai, Masahiro
 PA TDK Corporation, Japan
 SO Jpn. Kokai Tokkyo Koho, 41 pp.
 CODEN: JKXKAF
 DT Patent
 LA Japanese
 FAN.CNT 1

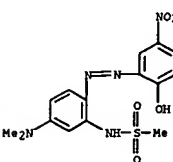
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005193413	A	20050721	JP 2003-435517	20031226
PRAI	JP 2003-435517		20031226		
OS	MARPAT 143:142838				



AB The material contains a chelate compound of a metal and an azo compound I or II (A, B = arom. ring; X1 = residue of removing 2 actinic H from a group having ≥2 actinic H; X2 = residue of removing an actinic H from a group having ≥1 actinic H; Y1 = substituent). The material shows good recording, reading properties and lightfastness.

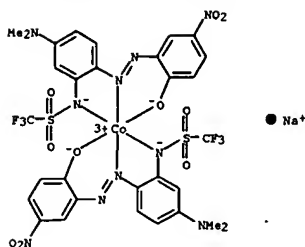
IT 858669-73-5DP, cobalt complex 858949-65-2P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Use)
 (optical recording material containing metal-azo chelate compound)

RN 858669-73-5 CAPLUS
 CN Methanesulfonamide, N-[5-(dimethylamino)-2-[(2-hydroxy-5-nitrophenyl)azo]phenyl]- (9CI) (CA INDEX NAME)



RN 858949-65-2 CAPLUS
 CN Cobaltate(1-), bis[N-[5-(dimethylamino)-2-[(2-hydroxy-5-nitrophenyl)azo-κN]]phenyl]-1,1,1-trifluoromethanesulfonamidato(2-)-κN-, sodium (9CI) (CA INDEX NAME)

L5 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L5 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:870932 CAPLUS

DN 141:351422

TI Methane sulfonamide azo dyes.

IN Pflieger, Dominique; Metz, Hans Joachim

PA Clariant G.m.b.H., Germany

SO Ger. Offen., 20 pp.

CODEN: GVXXEX

DT Patent

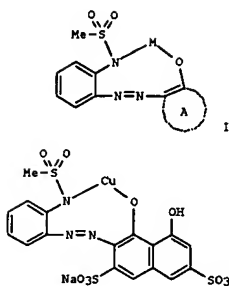
LA German

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 10316402	A1	20041021	DE 2003-10316402	20030410
CA 2521861	A1	20041021	CA 2004-2521861	20040331
WO 2004090045	A1	20041021	WO 2004-EP3380	20040331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TH, TM, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZH, ZV				
RW: BV, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZH, ZV, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1615973	A1	20060118	EP 2004-724549	20040331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
BR 2004009226	A	20060328	BR 2004-9226	20040331
CN 1771297	A	20060510	CN 2004-80009541	20040331
JP 2006524274	T	20061026	JP 2006-504924	20040331
US 2006286477	A1	20061221	US 2005-552602	20051007
PRAI DE 2003-10316402	A	20030410		
WO 2004-EP3380	W	20040331		
OS MARPAT 141:351422				
G1				

APPLICANT

L5 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



AB Monoazo-, diazo and triazo dyes I (M = 2 H atoms or Cu, Co, Ni, Mn, Zn or Al, A = the residue of a substituted naphthyl or pyrazolyl group) prepared by diazotizing of 2-di(methanesulfonyl)amidoaniline in the customary manner, coupling with aromatic coupling component and, optionally reacting with Cu, Co, Ni, Mn, Zn or Al salts are used as coloring agents for jet printing inks and electrophotog. toners, for paints, plastics, rubber and wood materials. Thus, warming an aqueous solution of a monoazo dye

[prepared by diazotizing of 2-di(methanesulfonyl)amidoaniline in aqueous HCl solution with

NaNO₂ and coupling with 1,8-dihydroxy-3,6-naphthalenedisulfonic acid disodium salt] containing also NaOH, sodium acetate and CuSO₄ 1 h at 80° gave a monoazo complex II. An aqueous solution of II containing also diethylene glycol 20.0, triethanolamine 1.0 and urea 1.0 g in 78.0 g of water is useful as light-resistant storage stable inks.

IT 777079-41-1P 777079-45-5P

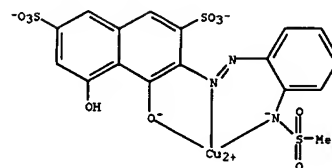
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(methane sulfonamide azo dyes and their metal complexes as coloring agents for jet printing inks and electrophotog. toners)

RN 777079-41-1 CAPLUS

CN Cuprate(2-), [4-(hydroxy-κO)-5-hydroxy-3-[[2-[(methanesulfonyl)amino-κN]phenyl]azo-κN]-2,7-naphthalenedisulfonato(4-)]-, disodium (9CI) (CA INDEX NAME)

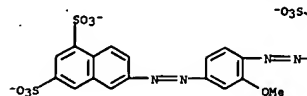
L5 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

● 2 Na⁺

RN 777079-45-5 CAPLUS

CN Cuprate(4-), [6-[[4-[[8-(hydroxy-κO)-1-hydroxy-7-[[2-[(methanesulfonyl)amino-κN]phenyl]azo-κN]-3,6-disulfo-2-naphthalenyl]azo]-3-methoxyphenyl]azo]-1,3-naphthalenedisulfonato(6-)]-, tetrasodium (9CI) (CA INDEX NAME)

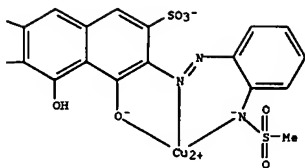
PAGE 1-A

● 4 Na⁺

L5 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

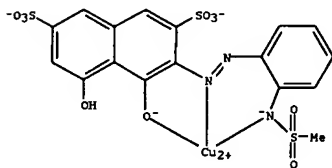
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PAGE 1-B



IT 777079-42-2DP, C12-14 alkyl ammonium salt 777079-43-3P
777079-44-4DP, C12-14 alkyl ammonium salt 777079-47-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(methane sulfonamide azo dyes and their metal complexes as coloring agents for jet printing inks and electrophotog. toners)

RN 777079-42-2 CAPLUS
CN Cuprate(2-), [4-(hydroxy- κ O)-5-hydroxy-3-[[2-[(methylsulfonyl)amino- κ N]phenyl]azo- κ N]-2-naphthalenedisulfonato(4-)]-, dihydrogen (9CI) (CA INDEX NAME)

● 2 H⁺

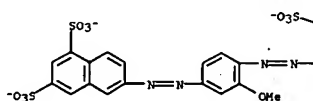
RN 777079-43-3 CAPLUS
CN Cuprate(2-), [4-(hydroxy- κ O)-6-[[2-(hydroxy-6-sulfo-1-naphthalenyl)azo]-3-[[2-[(methylsulfonyl)amino- κ N]phenyl]azo- κ N]-2-naphthalenedisulfonato(4-)]-, disodium (9CI) (CA INDEX NAME)

L5 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

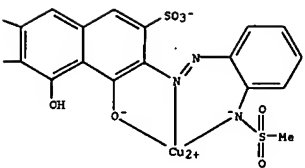
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PAGE 1-A

● 4 H⁺

PAGE 1-B



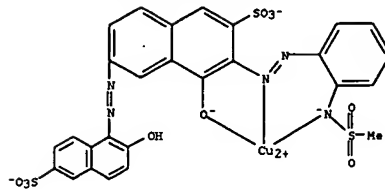
CH 2

CRN 104-75-6
CHF C8 H19 N

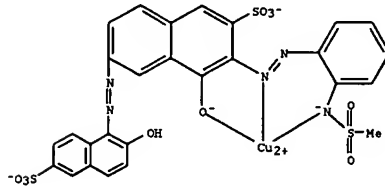


L5 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

● 2 Na⁺

RN 777079-44-4 CAPLUS
CN Cuprate(2-), [4-(hydroxy- κ O)-6-[[2-(hydroxy-6-sulfo-1-naphthalenyl)azo]-3-[[2-[(methylsulfonyl)amino- κ N]phenyl]azo- κ N]-2-naphthalenedisulfonato(4-)]-, dihydrogen (9CI) (CA INDEX NAME)

● 2 H⁺

RN 777079-47-7 CAPLUS
CN Cuprate(4-), [6-[[4-[[8-(hydroxy- κ O)-1-hydroxy-7-[[2-[(methylsulfonyl)amino- κ N]phenyl]azo- κ N]-3,6-disulfo-2-naphthalenyl]azo]-3-methoxyphenyl]azo]-1,3-naphthalenedisulfonato(6-)]-, tetrahydrogen, compd. with 2-ethyl-1-hexanamine (1:4) (9CI) (CA INDEX NAME)

CH 1

CRN 777079-46-6
CHF C34 H21 Cu N7 O17 S5 . 4 H

L5 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:292256 CAPLUS

DN 141:6886

TI A versatile direct approach to ortho-substituted azobenzenes from benzotriazoles

AU Alvarez Mico, Xavier; Ziegler, Thomas; Subramanian, Lakshminarayananapuram R.

CS Institut fuer Organische Chemie, Universitaet Tübingen, Tübingen, 72076, Germany

SO Angewandte Chemie, International Edition (2004), 43(11), 1400-1403

CODEN: AICEF5; ISSN: 1433-7851

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA English

OS CASREACT 141:6886

AB The hidden potential of benzotriazoles to act as diazonium synthons, has been witnessed in the reactions, of 1-[(nonafluorobutyl)sulfonyl]-1H-1,2,3-benzotriazole with sodium phenoxide in which ortho-substituted azobenzenes, were formed. The intermediacy of a diazonium compound was ruled out; instead, a mechanism was proposed to proceed via a coupling-type reaction. The reaction can be steered towards ortho or para substitution simply by changing the solvent. For example, the reaction of 1-[(nonafluorobutyl)sulfonyl]-1H-benzotriazole with phenol gave 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-[(2-hydroxyphenyl)azo]phenyl]-1-butanedisulfonamide (2-hydroxy isomer) in toluene. On the other hand, the same reactants gave 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-[(4-hydroxyphenyl)azo]phenyl]-1-butanedisulfonamide (4-hydroxy isomer) in DMF as solvent.

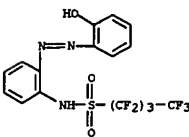
IT 695202-86-9P 695202-88-1P 695202-89-2P

695202-90-5P 695202-92-7P 695202-93-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of ortho-substituted azobenzenes from phenol derivs. and [(nonafluorobutyl)sulfonyl]-1H-benzotriazole)

RN 695202-86-9 CAPLUS

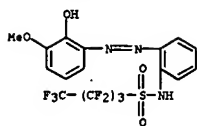
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-[(2-hydroxyphenyl)azo]phenyl]- (9CI) (CA INDEX NAME)



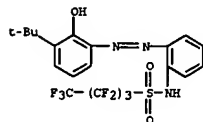
RN 695202-88-1 CAPLUS

CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-[(2-hydroxy-3-methoxyphenyl)azo]phenyl]- (9CI) (CA INDEX NAME)

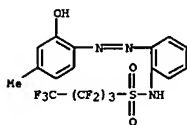
L5 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 695202-89-2 CAPLUS
CN 1-Butanesulfonamide, N-[2-((1,1-dimethylethyl)-2-hydroxyphenyl)azo]phenyl]-1,1,2,2,3,3,4,4,4-nonafluoro- (9CI) (CA INDEX NAME)



RN 695202-90-5 CAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-((2-hydroxy-4-methylphenyl)azo)phenyl]- (9CI) (CA INDEX NAME)



RN 695202-92-7 CAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-((2-hydroxy-1-naphthalenyl)azo)phenyl]- (9CI) (CA INDEX NAME)

L5 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:164120 CAPLUS

DN 140:415259

TI Crystal structure of nonafluoro-N-[(E)-2-(2-hydroxyphenyl)diazanyl]phenyl)-1-butanesulfonamide, C16H10F9N3O3S

AU Mico, X. Alvarez; Richter, M.; Schwarz, S.; Straehle, J.; Ziegler, T.; Subramanian, L. R.

CS Institute of Organic Chemistry, University of Tuebingen, Tuebingen, D-72076, Germany

SO Zeitschrift fuer Kristallographie - New Crystal Structures (2003), 218(4), 549-550

CODEN: ZKNSFT; ISSN: 1433-7266

PB Oldenbourg Wissenschaftsverlag GmbH

DT Journal

LA English

AB The title compound is monoclinic, space group P21/c, with a 5.6549(3), b 12.2550(9), c 27.170(6) Å, β 90.446(8)°; Z = 4, R = 0.088, R_w = 0.261, T = 213 K. Atomic coordinates are given. Some bond lengths, bond angles and hydrogen bonding are given and discussed.

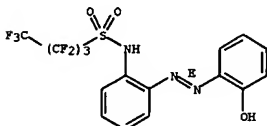
IT 690664-14-3

RL: FRP (Properties)
(crystal structure of)

RN 690664-14-3 CAPLUS

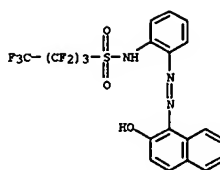
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-[(1E)-2-(2-hydroxyphenyl)azo]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

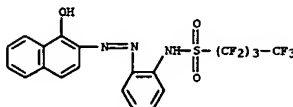


RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 695202-93-8 CAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-[2-[(1-hydroxy-2-naphthalenyl)azo]phenyl]- (9CI) (CA INDEX NAME)



RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1970:505063 CAPLUS

DN 73:105063

TI New types of isomerism in 1:2 chromium(III) and cobalt(III) complexes of o,o'-dihydroxyazo compounds. Pyramidally bonded nitrogen with a high inversion barrier?

AU Schetty, Guido

CS Wiss. Lab., J. R. Geigy A.-G., Basel, Switz.

SO Helvetica Chimica Acta (1970), 53(6), 1437-59

CODEN: HCACAV; ISSN: 0018-019X

DT Journal

LA German

AB Previously reported x-ray and NMR data of 1:2 Co(III) complexes of o,o'-dihydroxyazo compds. indicate that metal chelates of di- and tridentate azo compds. are present in the diketo or quinone monohydrazone form; as the metal atoms replace the hydrazone proton, the coordinating N atom can be predetd. For 1:2 Cr complexes from o,o'-dihydroxyazo compds., small amts. of byproducts were observed which have the empirical composition of the main complexes. The 3 bonds

of the coordinated N atom, which is sp³ hybridized, are arranged in a pyramidal form. In 1:2 Cr complexes where 2 of these ligands are coordinated to the metal atom perpendicularly to each other, 3 conformers are possible. These conformers are ascribed to 1 ligand of the observed isomeric complexes; for another group at least 1 ligand is coordinated in the plane azo form. The postulated 3-bonded N atom possesses the requirements for a high inversion barrier and is a member of 2 ortho condensed rings and it is bound to a Lewis acid.

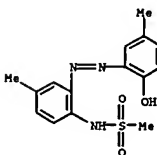
IT 28788-77-4P 29828-84-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

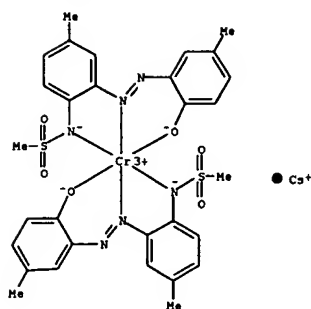
RN 28788-77-4 CAPLUS

CN Methanesulfono-p-toluidide, 2'-[(6-hydroxy-m-tolyl)azo]- (8CI) (CA INDEX NAME)



RN 29828-84-0 CAPLUS
CN Chromate(1-), bis[2'-[(6-hydroxy-m-tolyl)azo]methanesulfono-p-toluidato(2-)]-, cesium (8CI) (CA INDEX NAME)

L5 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L5 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1968:31025 CAPLUS

DN 68:31025

TI Ring strain in pentacyclic azo dye-chromium(III) complexes

AU Schetty, Guido

CS J. R. Geigy A.-G., Basel, Switz.

SO Helvetica Chimica Acta (1967), 50(7), 1836-42

CODEN: HCACAV; ISSN: 0018-019X

DT Journal

LA German

GI For diagram(s), see printed CA Issue.

AB Ring strain was demonstrated in a series of pentacyclic Cr(III) complexes (I) of azo dyes, in which 2 azo dye mols. are vertical to each other and are linked so that a metal-containing heterocycle is formed. The ring size

of this heterocycle was increased from 8-15 members ($n = 3-10$) and the changes in the electron absorption spectra were followed. The 15-membered ring had the same electron absorption spectrum as the corresponding 1:2-complex, which does not contain this heterocycle. The position of the 2 azo dye mols. must therefore be identical in the 2 complexes.

IT 17127-95-6P 17127-96-7P 17127-97-8P

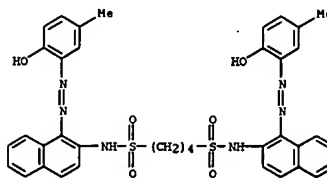
17127-98-9P 18114-86-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 17127-95-6 CAPLUS

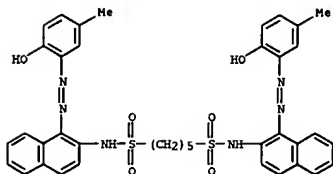
CN 1,4-Butanedisulfonamide, N,N'-bis[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]- (8CI) (CA INDEX NAME)



RN 17127-96-7 CAPLUS

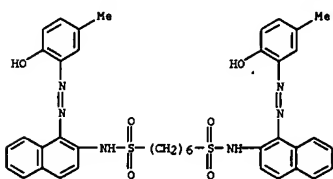
CN 1,5-Pentanedisulfonamide, N,N'-bis[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]- (8CI) (CA INDEX NAME)

L5 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



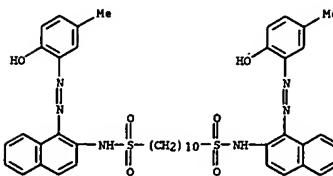
RN 17127-97-8 CAPLUS

CN 1,6-Hexanedisulfonamide, N,N'-bis[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]- (8CI) (CA INDEX NAME)



RN 17127-98-9 CAPLUS

CN 1,10-Decanedisulfonamide, N,N'-bis[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]- (8CI) (CA INDEX NAME)



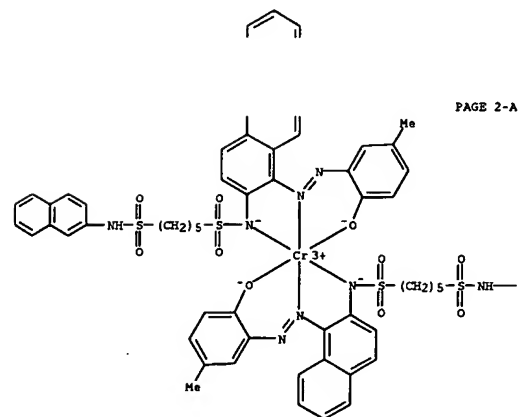
RN 18114-86-8 CAPLUS

CN Chromate(1-), bis[N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]-N'-2-naphthyl-1,5-pentanedisulfonamido(2-)]-, cesium (8CI) (CA INDEX NAME)

L5 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

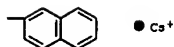
PAGE 2-A



L5 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

PAGE 2-B



L5 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1967:422885 CAPLUS

DN 67:22885

T1 Chromium- and cobalt-pentacyclic azo dye complexes with Drew-Pfizzner

Configuration

AU Scherzy, Guido

CS Wiss. Lab., J. R. Gaigy A.-G., Basel, Switz.

SO Helvetica Chimica Acta (1967), 50(4), 1039-52

CODEN: HCACAV; ISSN: 0018-019X

DT Journal

LA German

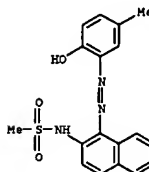
AB For the first time pentacyclic Cr(III) and Co(III) azo dye complexes with, Drew-Pfizzner configuration were produced. Comparison of their electronic spectra with those of analogous 1:2 complexes enables novel conclusions as to the shape of the octahedron formed by the metal-binding atoms.

IT 14554-22-4DP, Methanesulfonamide, N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]-, complexes with chromium and cobalt 14554-22-4P 14554-24-6DP, Ethanesulfonamide, N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]-, chromium complex 14554-24-6P 14554-25-7DP, 1-Propanesulfonamide, N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]-, chromium complex 14554-25-7P 14557-62-1P 14557-64-3P 14649-23-1P 14649-24-2P 14649-25-3P 14649-26-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 14554-22-4 CAPLUS

CN Methanesulfonamide, N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]- (8CI) (CA INDEX NAME)

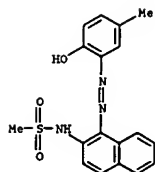


RN 14554-22-4 CAPLUS

CN Methanesulfonamide, N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]- (8CI) (CA INDEX NAME)

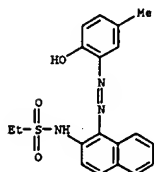
L5 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

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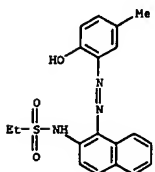
RN 14554-24-6 CAPLUS

CN Ethanesulfonamide, N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]- (8CI) (CA INDEX NAME)



RN 14554-24-6 CAPLUS

CN Ethanesulfonamide, N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]- (8CI) (CA INDEX NAME)

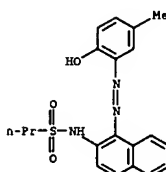


RN 14554-25-7 CAPLUS

CN 1-Propanesulfonamide, N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]- (8CI) (CA INDEX NAME)

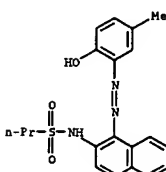
L5 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)



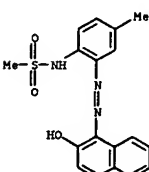
RN 14554-25-7 CAPLUS

CN 1-Propanesulfonamide, N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]- (8CI) (CA INDEX NAME)



RN 14557-62-1 CAPLUS

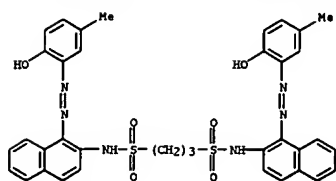
CN Methanesulfono-p-toluidide, 2'-[[2-hydroxy-1-naphthyl]azo]- (8CI) (CA INDEX NAME)



RN 14557-64-3 CAPLUS

CN 1,3-Propanedisulfonamide, N,N'-bis[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]- (8CI) (CA INDEX NAME)

L5 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



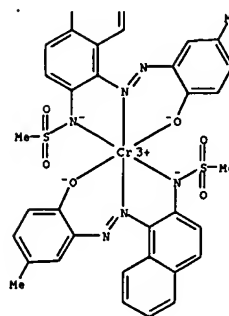
RN 14649-23-1 CAPLUS
 CN Chromate(1-), bis[N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]methanesulfonamido(2-)]-, cesium (8CI) (CA INDEX NAME)

PAGE 1-A



L5 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A

● Cs⁺

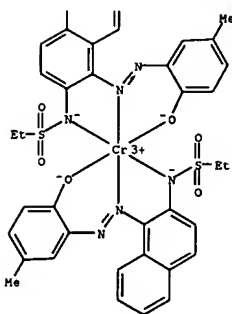
RN 14649-24-2 CAPLUS
 CN Chromate(1-), bis[N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]ethanesulfonamido(2-)]-, cesium (8CI) (CA INDEX NAME)

PAGE 1-A



L5 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A

● Cs⁺

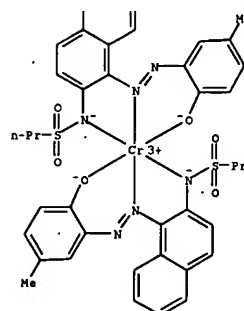
RN 14649-25-3 CAPLUS
 CN Chromate(1-), bis[N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]-1-propanesulfonamido(2-)]-, cesium (8CI) (CA INDEX NAME)

PAGE 1-A



L5 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A

● Cs⁺

RN 14649-26-4 CAPLUS
 CN Cobaltate(1-), bis[N-[1-[(6-hydroxy-m-tolyl)azo]-2-naphthyl]methanesulfonamido(2-)]-, cesium (8CI) (CA INDEX NAME)

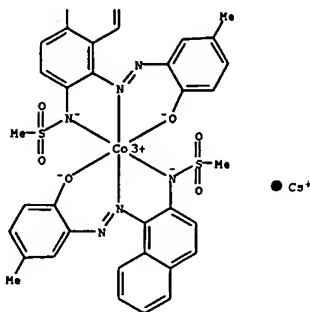
PAGE 1-A



L5 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

PAGE 2-A



L5 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1964:17428 CAPLUS

DN 60:17428

OREF 60:3135c-e

TI Heavy metal-containing azo dyes

IN Beffa, Fabio; Schetty, Guido

PA J. R. Geigy A.-G.

SO 7 pp.

DT Patent

LA Unavailable

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1151889		19630725	DE 1960-G30677	19601011
GB 955506			GB	
US 3132130		19640505	US 1960-61837	19601011
CH 19591012				

AB Dyes of the general formula 2-AN:NC6H4NHSO2R, where R is Me, 4-MeC6H4, or 3-MeO2SC6H4, and A is a radical containing OH or NH2 adjacent to the azo N, form Cr or Co complexes which dye lacquers, varnishes, and polypeptide textiles. Thus, 2-HZNC6H4N(SO2Me)2 (I) 26.4 was diazotized and coupled with 1,7-(MeO2CNH) (HO)C10H6 22.2 in H2O 300, NaOH 4.2 parts, and sufficient Na2CO3 to make the mixture weakly alkaline to phenolphthalein after

coupling. The precipitated dye was filtered, dried, suspended in MeOCH2CH2OH 250 vols. and saponified at room temperature with 10N NaOH 30 vols. The mixture was

stirred 1 hr., neutralized with AcOH, refluxed a few hrs. with 220 parts of a solution of Na Cr salicylate (containing 2.86 parts Cr), and the Cr complex precipitated with NaCl solution, filtered, and dried. It was a dark powder

which dyed wool gray from neutral or weakly acid baths. Similarly, other dyes were prepared, one SO2R group being saponified after coupling (amine, coupling component, metal, and color on wool given): the 4-Me derivative of I, 2-HZNC10H7, Co, reddish gray; I, PhNHCOCH2Ac, Co, yellow; I, 1-(3-chlorophenyl)-3-methyl-5-pyrazolone, Cr, orange; 2-HZNC6H4N(SO2C6H4Me-4)2, 2-HZNC10H7, Cr, violet-bordeaux; 2-HZNC6H4N(SO2C6H4SO2Me-3)2 (II), 1,7-AcNH(HO)C10H6, Cr, gray; and II + 3,4-Me2C6H3OH, Co, brown.

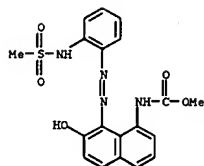
IT 98882-03-2P, 1-Naphthalenecarbanic acid, 7-hydroxy-8-[(o-methanesulfonamidophenyl)azo]-, methyl ester, Cr complex
RL: PREP (Preparation)
(preparation of)

RN 98882-03-2 CAPLUS

CN 1-Naphthalenecarbanic acid, 7-hydroxy-8-[(o-methanesulfonamidophenyl)azo]-, methyl ester (7CI) (CA INDEX NAME)

L5 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)



L5 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1963:43068 CAPLUS

DN 59:36068

OREF 59:6552a-b

TI Metalized azo dyes

IN Maderni, Piero; Wehrli, Walter

PA Sandoz Ltd.

SO 4 pp.

DT Patent

LA Unavailable

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CH 360446		19620414	CH	19570625
CH 19570625				

AB Cr and Co complexes (1:2) of o-hydroxy-o'-methylsulfonylamino azo compds. are prepared. Thus, 2-HZNC6H4N(SO2Me)2 (I) 6.6 was diazotized and coupled with 7,1-HOC10H6NHCO2CH2CH2OEt 7.2 parts. The monoazo compound was filtered, washed with H2O 50, and, to hydrolyze one MeSO2 group, suspended in H2O 770 at 90°, treated with 30N NaOH 25, stirred for 5 min. at 85-90°, neutralized with concentrated HCl 17 parts, filtered, washed with H2O and dried in vacuo at 65° to give a red-brown powder (II), violet in dilute NaOH, red in concentrated H2SO4. II 4.7 was heated for 3.5 hrs.

at 95° and 3 hrs. at 115° with HCONH2 30 and Cr(OAc)2 (Cr = 17.54) 3, then cooled to 20° and poured into 104 NaCl 160 parts, filtered, washed with 1% NaCl and dried in vacuo to give a dark blue powder, which dyed wool, silk, and synthetic polyamides from neutral to weakly acid baths gray shades of good fastness; the Co complex dyed these fibers brownish gray. Similarly, 1,2-H2N(MeSO2)2N(C10H6 (III) and 1-(3-sulfamoylphenyl)-3-methyl-5-pyrazolone gave a reddish brown methylsulfonylamino monoazo dye, yellow in dilute NaOH, red-violet in concentrated

H2SO4 which was converted to a bordeaux red Cr complex dye and to a brown Co complex dye. Preparation of I: 1 mole 1,2-OZN(H2N)C6H4 treated with 1 mole

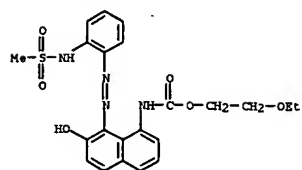
MeSO2Cl gave 1,2-OZN(MeSO2NH)C6H4, m. 104-5°, which was treated with a 2nd mole of MeSO2Cl in pyridine to give 1,2-OZN(MeSO2)2N(C6H4 (IV), m. 181-3°, reduction of IV gave I, m. 161-2°. Preparation of III: nitration of 2-MeSO2NHC10H7 gave 1,2-OZN(MeSO2NH)C10H6, m. 146-7°, which was treated with MeSO2Cl in pyridine to give 1,2-OZN(MeSO2)2N(C10H6 (V), m. 193-4°, reduction of V gave III, m. 180-1°.

IT 101015-10-5P, 1-Naphthalenecarbanic acid, 7-hydroxy-8-[(o-methanesulfonamidophenyl)azo]-, 2-ethoxyethyl ester
RL: PREP (Preparation)
(preparation of)

RN 101015-10-5 CAPLUS

CN 1-Naphthalenecarbanic acid, 7-hydroxy-8-[(o-methanesulfonamidophenyl)azo]-, 2-ethoxyethyl ester (7CI) (CA INDEX NAME)

L5 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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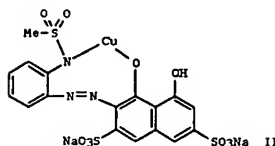
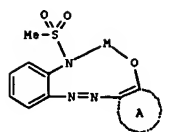
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L7	53	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"METZ HANS JOACHIM"/AU
L8	68	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L6 OR L7
L10	2	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L8 AND (SULFOAMIDE OR SULFONAMI DE)

=> d 1-2 bib abs . .

L10 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2004:870932 CAPLUS
 DN 141:351422
 TI Methane sulfonamide azo dyes.
 IN Pflieger, Dominique; Metz, Hans Joachim
 PA Clariant G.m.b.H., Germany
 SO Ger. Offen., 20 pp.
 CODEN: GWXKEX
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FI DE 10316402	A1	20041021	DE 2003-10316402	20030410
CA 2521861	A1	20041021	CA 2004-2521861	20040331
WO 2004090045	A1	20041021	WO 2004-EP3380	20040331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MV, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZH, ZW				
RV: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZH, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1615973	A1	20060119	EP 2004-724549	20040331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
BR 2004009226	A	20060328	BR 2004-9226	20040331
CN 1771297	A	20060510	CN 2004-80009541	20040331
JP 2006524274	T	20061026	JP 2006-504924	20040331
US 2006286477	A1	20061221	US 2005-552602	20051007
FRAI DE 2003-10316402	A	20030410		
WO 2004-EP3380	W	20040331		
OS MARPAT 141:351422				
GI				

L10 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



AB Monoazo-, disazo and triazo dyes I (M = 2 H atoms or Cu, Co, Ni, Mn, Zn or Al, A = the residue of a substituted naphthyl or pyrazolyl group) prepared by diazotizing of 2-di(methanesulfonyl)amidoaniline in the customary manner, coupling with aromatic coupling component and, optionally reacting with Cu, Co, Ni, Mn, Zn or Al salts are used as coloring agents for jet printing inks and electrophotog. toners, for paints, plastics, rubber and wood materials. Thus, warming an aqueous solution of a monoazo dye [prepared by diazotizing of 2-di(methanesulfonyl)amidoaniline in aqueous HCl solution with NaNO2 and coupling with 1,8-dihydroxy-3,6-naphthalenedisulfonic acid disodium salt] containing also NaOH, sodium acetate and CuSO4 1 h at 80° gave a monoazo complex II. An aqueous solution of II containing also diethylene glycol 20.0, triethanolamine 1.0 and urea 1.0 g in 78.0 g of water is useful as light-resistant storage stable inks.

L10 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1997:750660 CAPLUS
 DN 128:35976
 TI Mixtures of 2:1 aluminum complexes
 IN Pflieger, Dominique; Kaul, Bansil Lal
 PA Clariant Finance (Evi) Limited, Virgin I. (Brit.); Pflieger, Dominique; Kaul, Bansil Lal
 SO PCT Int. Appl., 13 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FI WO 9743344	A1	19971120	WO 1997-1B546	19970514
W: JP, US				
RV: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 901508	A1	19990317	EP 1997-918300	19970514
EP 901508	B1	20021030		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
JP 2001502723	T	20010227	JP 1997-540693	19970514
US 6024771	A	20000215	US 1998-180755	19981113
FRAI GB 1996-10001	A	19960514		
GB 1996-16554	A	19960806		
WO 1997-1B546	W	19970514		
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title mixts. contain I (R3 = methoxypropyl; R5 = 2,5-dimethoxyphenyl, 2-methoxyphenyl; the sulfonamide groups in the 5-position), II [R6 = H, (methylsulfonamido)-2-hydroxyphenyl; the methylsulfonamido group in the 4-position], or III [R8 = 2-methoxyphenyl, CH2CH(CH2)3Me; the methylsulfonamido group in the 5-position]. 2-Amino-4-(3-methoxypropylaminosulfonyl)phenol was diazotized, coupled with 2,5-dimethoxyacetanilide and 2-methoxyacetanilide, then metalized by Al sulfate and treated with triacetoneamine to obtain I as a mixture or syn. and asym. isomers with good solubility in ethanol and coloring nitrocellulose lacquers a greenish yellow tone.

=> d his full

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FILE 'REGISTRY' ENTERED AT 11:02:25 ON 11 JAN 2007

L1 STRUCTURE UPLOADED
 D
L2 STRUCTURE UPLOADED
 D
L3 2 SEA SSS SAM L1 OR L2
 D SCAN
L4 49 SEA SSS FUL L1 OR L2

FILE 'CAPLUS' ENTERED AT 11:03:36 ON 11 JAN 2007

L5 11 SEA ABB=ON PLU=ON L4
 D QUE L5 STAT
 D 1-11 BIB ABS HITSTR
 E PFLIEGER DOMINIQUE/AU
L6 16 SEA ABB=ON PLU=ON "PFLIEGER DOMINIQUE"/AU
 E METZ HANS JOACHIM/AU
L7 53 SEA ABB=ON PLU=ON "METZ HANS JOACHIM"/AU
L8 68 SEA ABB=ON PLU=ON L6 OR L7
L9 0 SEA ABB=ON PLU=ON L8 AND (METHANESULFONAMIDE OR METHANESULFOA
 MIDE)
L10 2 SEA ABB=ON PLU=ON L8 AND (SULFOAMIDE OR SULFONAMIDE)
 D QUE L10 STAT
 D 1-2 BIB ABS

FILE HOME

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DICTIONARY FILE UPDATES: 10 JAN 2007 HIGHEST RN 917201-58-2

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